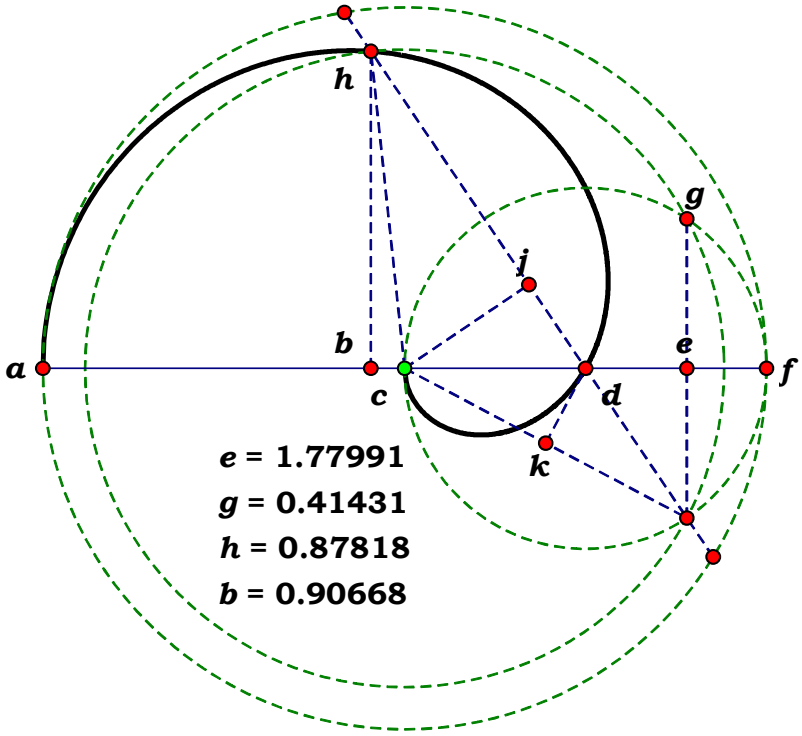


062725 Spiral P1



Given:

$ac := 1 \quad ae := 1.77991$

Descriptions:

$cf := ac \quad cd := \frac{cf}{2} \quad ce := ae - ac$

$ad := ac + cd \quad de := (ae - ad)$

$dj := de \quad dh := cd + 2 \cdot dj$

$ef := cf - ce \quad bd := \frac{de \cdot dh}{cd}$

$eg := \sqrt{ce \cdot ef} \quad bh := \frac{eg \cdot bd}{de}$

$eg = 0.41431 \quad bh = 0.87818$

$ab := ad - bd \quad ab = 0.90669$

$(4 \cdot e - 5) \cdot \sqrt{3 \cdot e - e^2 - 2} - h = 0.00000$

$\sqrt{3 \cdot e - e^2 - 2} - g = 0.00000$

$(4 \cdot e - 3) \cdot (2 - e) - b = 0.00000$

Definitions:

$cf - 1 = 0 \quad cd - \frac{1}{2} = 0 \quad ce - (ae - 1) = 0$

$ad - \frac{3}{2} = 0 \quad de - \left(ae - \frac{3}{2}\right) = 0 \quad dj - \left(ae - \frac{3}{2}\right) = 0$

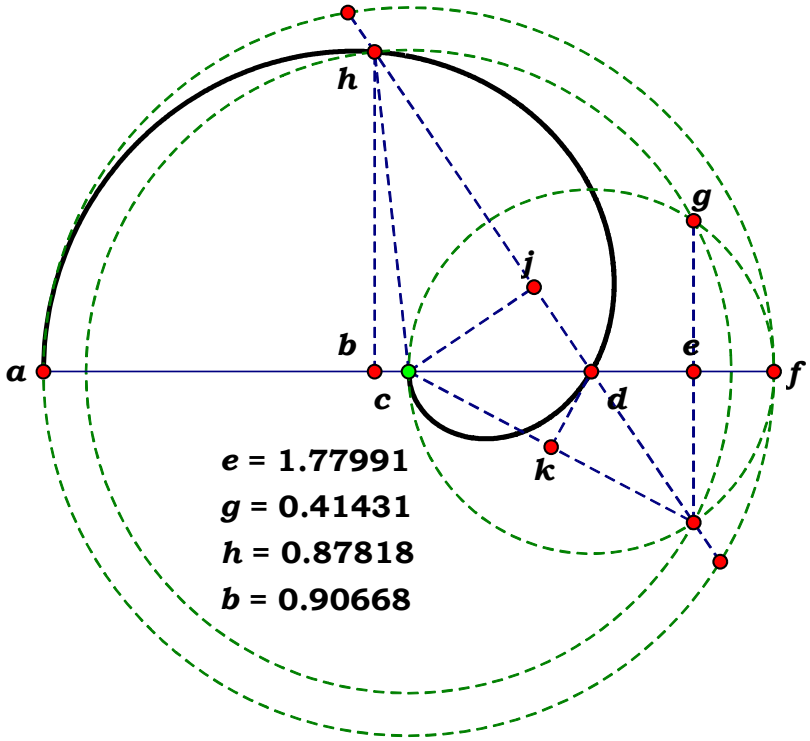
$dh - \left(\frac{4 \cdot ae - 5}{2}\right) = 0 \quad ef - (2 - ae) = 0$

$bd - \frac{(2 \cdot ae - 3) \cdot (4 \cdot ae - 5)}{2} = 0 \quad eg := \sqrt{(ae - 1) \cdot (2 - ae)}$

$bh := (4 \cdot ae - 5) \cdot \sqrt{3 \cdot ae - ae^2 - 2} \quad ab - (4 \cdot ae - 3) \cdot (2 - ae) = 0$



062725 Spiral P2



Given:

$ac := 1 \quad ae := 1.77991$

Descriptions:

$cf := ac \quad cd := \frac{cf}{2} \quad ce := ae - ac$

$ad := ac + cd \quad de := (ae - ad)$

$dj := de \quad dh := cd + 2 \cdot dj$

$ef := cf - ce \quad bd := \frac{de \cdot dh}{cd}$

$eg := \sqrt{ce \cdot ef} \quad bh := \frac{eg \cdot bd}{de}$

$eg = 0.41431 \quad bh = 0.87818$

$ab := ad - bd \quad ab = 0.90669$

$(4 \cdot e - 5) \cdot \sqrt{3 \cdot e - e^2 - 2} - h = 0.00000$

$\sqrt{3 \cdot e - e^2 - 2} - g = 0.00000$

$(4 \cdot e - 3) \cdot (2 - e) - b = 0.00000$

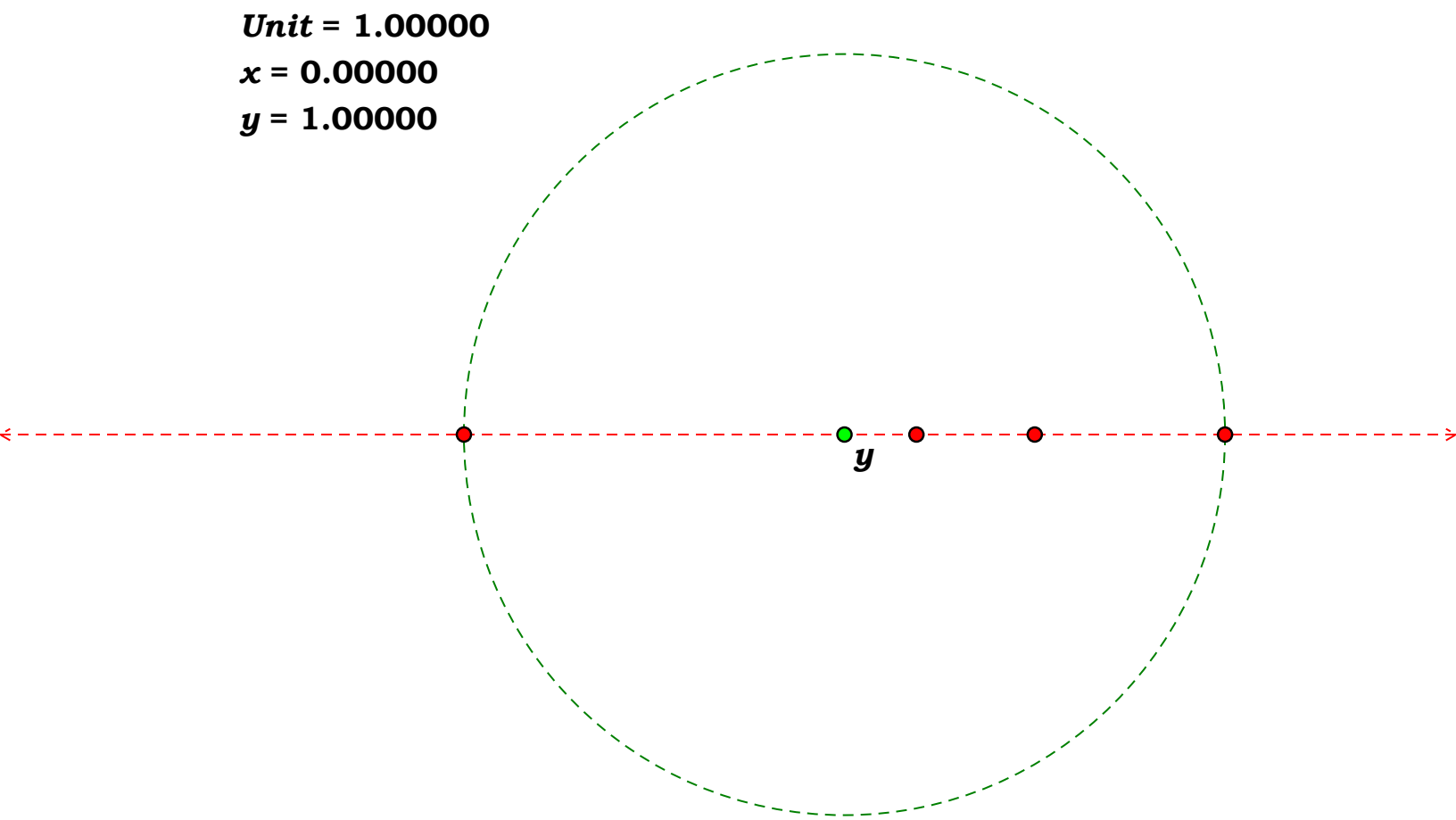
Definitions:

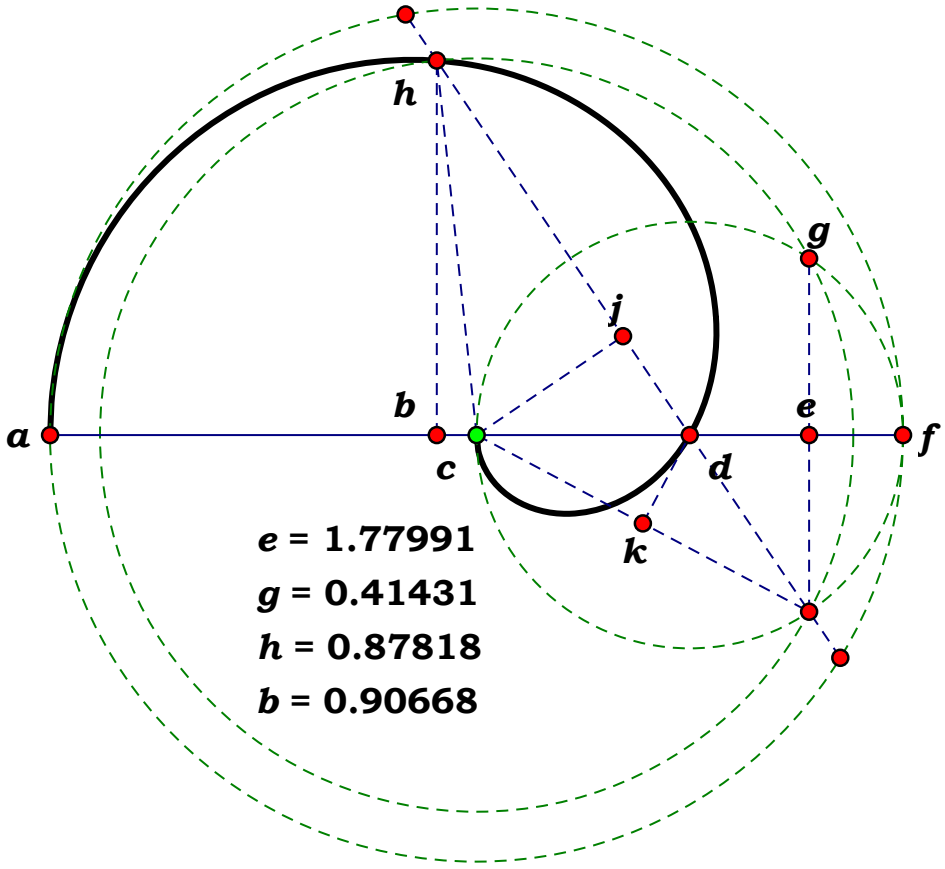
$cf - ac = 0 \quad cd - \frac{1}{2} = 0 \quad ce - (ae - 1) = 0 \quad ad - \frac{3}{2} = 0 \quad de - \frac{(3 - 2 \cdot ae)^2}{2 \cdot \sqrt{(2 \cdot ae - 3)^2}} = 0$

$dj - \frac{(3 - 2 \cdot ae)^2}{2 \cdot \sqrt{(2 \cdot ae - 3)^2}} = 0 \quad dh - \frac{\sqrt{(4 \cdot ae - 5)^2}}{2} = 0 \quad ef - (2 - ae) = 0$

$bd - \frac{\sqrt{[(2 \cdot ae - 3) \cdot (4 \cdot ae - 5)]^2}}{2} = 0 \quad eg - \sqrt{3 \cdot ae - ae^2 - 2} = 0$

$bh - (4 \cdot ae - 5) \cdot \sqrt{3 \cdot ae - ae^2 - 2} = 0 \quad \frac{bh}{eg} - (4 \cdot ae - 5) = 0 \quad ab - (4 \cdot ae - 3) \cdot (2 - ae) = 0$


Unit = 1.00000
x = 0.00000
y = 1.00000
y



$$(4\cdot e - 5)\cdot\sqrt{3\cdot e - e^2 - 2} - h = 0.00000$$

$$\sqrt{3\cdot e - e^2 - 2} - g = 0.00000$$

$$(4\cdot e - 3)\cdot(2 - e) - b = 0.00000$$

$$de - \left(ae - \frac{3}{2}\right) = 0.00000$$

$$dh - \frac{4\cdot ae - 5}{2} = 0.00000$$

$$bd - \frac{(2\cdot ae - 3)\cdot(4\cdot ae - 5)}{2} = 0.00000$$

Three out of twelve required logical operators asserted of them. Notice that these flaws did not effect the important last two equations.

$$\frac{(3 - 2\cdot ae)^2}{2\cdot\sqrt{(2\cdot ae - 3)^2}} = 0.18612$$

$$de - \frac{(3 - 2\cdot ae)^2}{2\cdot\sqrt{(2\cdot ae - 3)^2}} = 0.00000$$

$$\frac{\sqrt{(4\cdot ae - 5)^2}}{2} = 0.87225$$

$$dh - \frac{\sqrt{(4\cdot ae - 5)^2}}{2} = 0.00000$$

$$\frac{\sqrt{((2\cdot ae - 3)\cdot(4\cdot ae - 5))^2}}{2} = 0.32469$$

$$bd - \frac{\sqrt{((2\cdot ae - 3)\cdot(4\cdot ae - 5))^2}}{2} = 0.00000$$

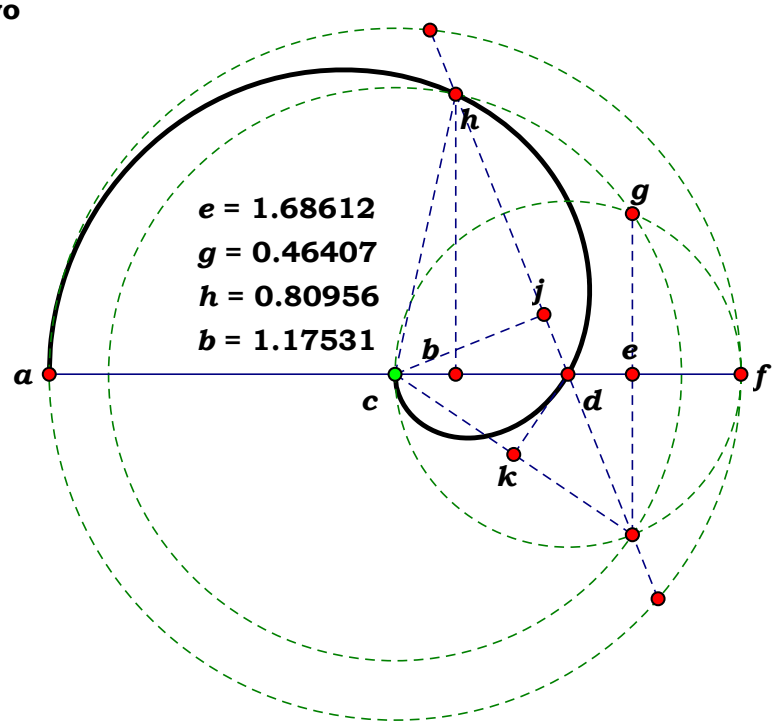
$$\sqrt{3\cdot ae - ae^2 - 2} = 0.46407$$

$$g - \sqrt{3\cdot ae - ae^2 - 2} = 0.00000$$

$$\left((4\cdot e - 5)\cdot\sqrt{3\cdot e - e^2 - 2}\right) = 0.80956$$

$$h - \left((4\cdot e - 5)\cdot\sqrt{3\cdot e - e^2 - 2}\right) = 0.00000$$

$$b - (4\cdot ae - 3)\cdot(2 - ae) = 0.00000$$



$ac = 5.64208$ cm
$cf = 5.64208$ cm
$cd = 2.82104$ cm
$ae = 9.51325$ cm
$ce = 3.87117$ cm
$de = 1.05013$ cm
$dh = 4.92129$ cm
$bd = 1.83194$ cm

$cf = 1.00000$
$cd = 0.50000$
$ae = 1.68612$
$ce = 0.68612$
$ad = 1.50000$
$de = 0.18612$
$dh = 0.87225$
$bd = 0.32469$
$2\cdot ae - 3 = 0.37225$
$4\cdot ae - 5 = 1.74449$
$g = 0.46407$
$h = 0.80956$
$b = 1.17531$

$$de - \left(ae - \frac{3}{2}\right) = 0.00000$$

$$dh - \frac{4\cdot ae - 5}{2} = 0.00000$$

$$bd - \frac{(2\cdot ae - 3)\cdot(4\cdot ae - 5)}{2} = 0.00000$$

Three out of twelve required logical operators asserted of them. Notice that these flaws did not effect the important last two equations.

$$\frac{(3 - 2\cdot ae)^2}{2\cdot\sqrt{(2\cdot ae - 3)^2}} = 0.13454$$

$$de - \frac{(3 - 2\cdot ae)^2}{2\cdot\sqrt{(2\cdot ae - 3)^2}} = 0.00000$$

$$\frac{\sqrt{(4\cdot ae - 5)^2}}{2} = 0.76908$$

$$dh - \frac{\sqrt{(4\cdot ae - 5)^2}}{2} = 0.00000$$

$$\frac{\sqrt{((2\cdot ae - 3)\cdot(4\cdot ae - 5))^2}}{2} = 0.20694$$

$$bd - \frac{\sqrt{((2\cdot ae - 3)\cdot(4\cdot ae - 5))^2}}{2} = 0.00000$$

$$\sqrt{3\cdot ae - ae^2 - 2} = 0.48156$$

$$g - \sqrt{3\cdot ae - ae^2 - 2} = 0.00000$$

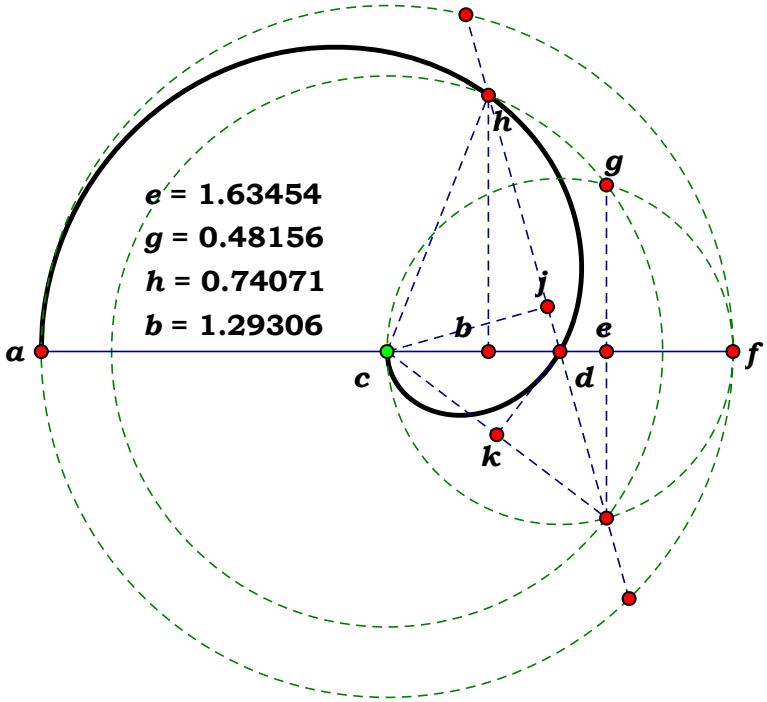
$$\left((4\cdot e - 5)\cdot\sqrt{3\cdot e - e^2 - 2}\right) = 0.74071$$

$$h - \left((4\cdot e - 5)\cdot\sqrt{3\cdot e - e^2 - 2}\right) = 0.00000$$

$$b - (4\cdot ae - 3)\cdot(2 - ae) = 0.00000$$

$ac = 5.64208$ cm
$cf = 5.64208$ cm
$cd = 2.82104$ cm
$ae = 9.22221$ cm
$ce = 3.58013$ cm
$de = 0.75908$ cm
$dh = 4.33921$ cm
$bd = 1.16759$ cm

$cf = 1.00000$
$cd = 0.50000$
$ae = 1.63454$
$ce = 0.63454$
$ad = 1.50000$
$de = 0.13454$
$dh = 0.76908$
$bd = 0.20694$
$2\cdot ae - 3 = 0.26908$
$4\cdot ae - 5 = 1.53816$
$g = 0.48156$
$h = 0.74071$
$b = 1.29306$



$$de - \left(ae - \frac{3}{2}\right) = 0.00000$$

$$dh - \frac{4\cdot ae - 5}{2} = 0.00000$$

$$bd - \frac{(2\cdot ae - 3)\cdot(4\cdot ae - 5)}{2} = 0.00000$$

Three out of twelve required logical operators asserted of them. Notice that these flaws did not effect the important last two equations.

$$\frac{(3 - 2\cdot ae)^2}{2\cdot\sqrt{(2\cdot ae - 3)^2}} = 0.32212$$

$$de - \frac{(3 - 2\cdot ae)^2}{2\cdot\sqrt{(2\cdot ae - 3)^2}} = 0.00000$$

$$\frac{\sqrt{(4\cdot ae - 5)^2}}{2} = 1.14424$$

$$dh - \frac{\sqrt{(4\cdot ae - 5)^2}}{2} = 0.00000$$

$$\frac{\sqrt{((2\cdot ae - 3)\cdot(4\cdot ae - 5))^2}}{2} = 0.73716$$

$$bd - \frac{\sqrt{((2\cdot ae - 3)\cdot(4\cdot ae - 5))^2}}{2} = 0.00000$$

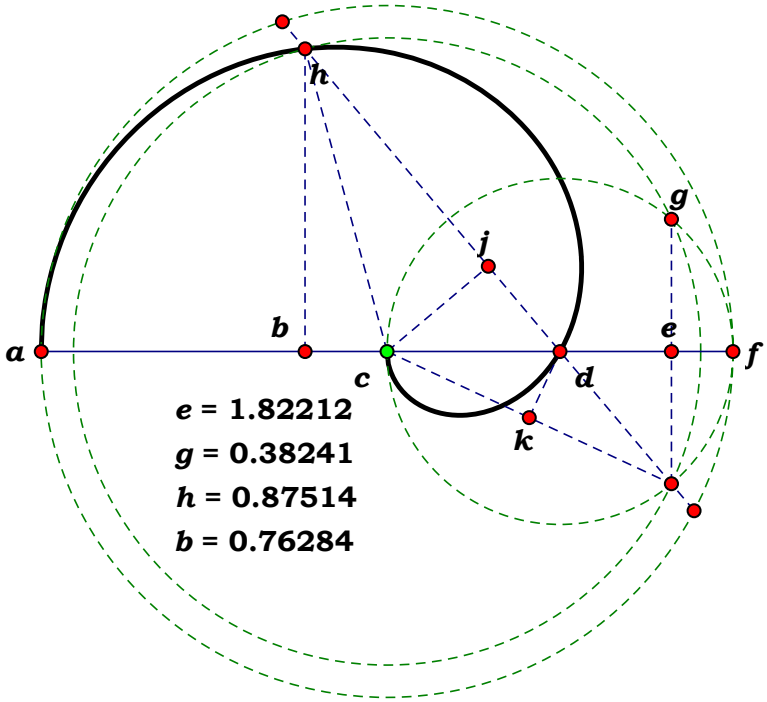
$$\sqrt{3\cdot ae - ae^2 - 2} = 0.38241$$

$$g - \sqrt{3\cdot ae - ae^2 - 2} = 0.00000$$

$$\left((4\cdot e - 5)\cdot\sqrt{3\cdot e - e^2 - 2}\right) = 0.87514$$

$$h - \left((4\cdot e - 5)\cdot\sqrt{3\cdot e - e^2 - 2}\right) = 0.00000$$

$$b - (4\cdot e - 3)\cdot(2 - e) = 0.00000$$



$ac = 5.64208$ cm
$cf = 5.64208$ cm
$cd = 2.82104$ cm
$ae = 10.28054$ cm
$ce = 4.63846$ cm
$de = 1.81742$ cm
$dh = 6.45588$ cm
$bd = 4.15911$ cm

$cf = 1.00000$
$cd = 0.50000$
$ae = 1.82212$
$ce = 0.82212$
$ad = 1.50000$
$de = 0.32212$
$dh = 1.14424$
$bd = 0.73716$
$2\cdot ae - 3 = 0.64424$
$4\cdot ae - 5 = 2.28847$
$g = 0.38241$
$h = 0.87514$
$b = 0.76284$

$h = 0.72148$

$h - (4 \cdot e - 5) \cdot \sqrt{3 \cdot e - e^2 - 2} = 0.00000$

$b = 1.31851$

$b - (4 \cdot e - 3) \cdot (2 - e) = 0.00000$

$e = 1.62198$

$A = 6.48791$

$A - 4 \cdot e = 0.00000$

$B = 0.37802$

$B - (2 - e) = 0.00000$

$C = 3.48791$

$C - (4 \cdot e - 3) = 0.00000$

$b = 1.31851$

$b - B \cdot C = 0.00000$

$D = 1.48791$

$D - (4 \cdot e - 5) = 0.00000$

$E = 4.86593$

$E - 3 \cdot e = 0.00000$

$F = 2.63081$

$F - e^2 = 0.00000$

$G = 0.23512$

$G - (3 \cdot e - e^2 - 2) = 0.00000$

$H = 0.48489$

$H - \sqrt{3 \cdot e - e^2 - 2} = 0.00000$

$J = 0.72148$

$D \cdot H = 0.72148$

